

**Planning Department  
City & County of San Francisco  
Wireless Telecommunications Services (WTS)  
Facilities Siting Guidelines  
Adopted May 23, 1996**

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Wireless Telecommunications Services  
Facilities Siting Guidelines

**May 23, 1996****INTRODUCTION**

During the last couple of years various project sponsors have submitted to the Planning Department ("the Department") applications for the permitting of wireless telecommunication facilities. Because this technology was new and the Department had not established policies and guidelines to govern the placement of these particular uses, many were simply handled through the administrative permitting process as either principal or allowable accessory uses. Eventually, however, the number of applications for such uses proliferated dramatically and numerous such uses were contemplated within residential areas of San Francisco. The possibility of continued placement of the technology in various residential areas of San Francisco soon led residents to articulate various concerns. Concerns about health, safety and visual impacts were communicated to the Department, as well as many San Francisco legislators. The increase in the number of applications and the areas potentially affected by these uses, plus the legitimate concerns raised by the residents and the Department, compelled the Department to re-examine its informal procedures in light of applicable Planning Code provisions and to consequently require a Conditional Use Authorization for many of the applications.

Since a Conditional Use Authorization for many of the wireless telecommunication facilities required the





approval of the Planning Commission ("the Commission"), the Commission, in connection with several applications for the installation of cellular telephone and personal communication systems, held extensive public hearings wherein many spoke against and in favor of such installations. As a result of those hearings, the Commission determined that, at the very least, the Department had to come forward, as quickly as possible, with comprehensive policies and guidelines to govern the siting of wireless telecommunication technology. The Commission opined that only through comprehensive guidelines and policies could the legitimate concerns and needs of the residents, the City, and the industry be addressed in a logical and balanced fashion. The Commission requested the comprehensive guidelines and policies to be incorporated as a Telecommunications Facilities Master Plan chapter of the Community Facilities Element of the City's Master Plan.

The Department's efforts to prepare comprehensive policies and guidelines soon revealed that to treat comprehensively the siting of the entire spectrum of telecommunication technology was a monumental task, given the complexity of and rapid evolution of the telecommunication technology itself. Thus, to address effectively the immediate concerns over and the needs of technology already making its way through the Department's permitting process, it was decided to generate policies and guidelines on a "phased" basis. The first "phase" of the anticipated policies and guidelines is directed to the cellular mobile telephone and wireless data transmission technology. This document therefore attempts to accommodate the competing interests for that type of technology.

The policies and guidelines presented in this document, and endorsed by the Commission by Resolution No. 14123, will provide guidance to Department staff where administrative review is warranted and to the Planning Commission in their consideration of conditional use applications for such facilities. The policies and guidelines will inform Project Sponsors of the standards to be used by the Department and Commission in the review of any proposed cellular mobile telephone projects, wireless data communication facilities or other similar facilities regulated by the Federal Communications Commission (FCC) and all applications will be reviewed and measured by the same standards as presented herein. Substantive amendments to these standards are to be submitted to the Planning Commission for their endorsement and the amended standards will be made available to the public and prospective Project Sponsors as they are made. The application information requirements described in Section 10 of these Guidelines supplement the information required in the Department's Conditional Use application handout. The information required by the Department's Conditional Use application and the information required in Section 10 herein must be provided to the Department at the time the application is submitted.

Again, it is important to note that due to legitimate logistical considerations, the policies and guidelines in this document (even though potentially applicable to other types of telecommunication technology) only address location policies and preferences, urban design policies and criteria, and sample conditions of approval for cellular mobile telephone technology, including Personal Communications Services (PCS), Enhanced Specialized Mobile Radio (ESMR) services, and other similar wireless technologies which feature similar equipment and/or share similar land use impacts and are regulated by the FCC, pursuant to the provisions of Section 209.6(b) and 227(h) and (i) of the Planning Code. These policies and guidelines do not, at this time, address similar policies, preferences and conditions of approval for AM or FM radio antennae towers, television antennae towers, personal pager microwave dishes, teleport satellite systems, or other similar facilities associated with Wireless Telecommunication Services. Those policies and guidelines will follow according to the mandate(s) of the Commission and will also be incorporated within a comprehensive Telecommunications Facilities chapter of the Community Facilities Element of the City's Master Plan.

## **Section 1. Background**



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Wireless telecommunications facilities such as radios and televisions have long played a vital role in San Francisco's communications network. Our police, fire and ambulance services have for the past few decades depended on radio receivers and transmitters and accompanying antennae and support structures, interspersed throughout the City, for emergency dispatch and response. AM and FM broadcast facilities keep the City's listeners tuned in to their radios, and many viewers still depend on the airways for their television reception. Many businesses, such as taxi and repair services, use radio-dispatched vehicles to serve the City.

The technological advances made in this type of technology have also had a direct impact on the types of goods and services made available to the everyday consumer. For example, the advances in cordless phone, cellular phone and personal paging technology during the past fifteen years have made wireless telecommunications very much a part of many businesses and the lives of the general public. It is now common for businesses and individuals to perceive a need for access to wireless communications to stay in business, to expand their business, to provide personal convenience, or to feel assured of personal safety and the ability to communicate with business, government or family and friends on demand.

Public access to personal mobile communications began in the 1980s and quickly gained appeal among people who felt that they needed to be reached at any given time at any place. In 1992, there were approximately 10 million cellular telephone users across the United States, and by the end of 1994, that figure had grown to over 24 million. This figure does not include users of paging systems, Enhanced Specialized Mobile Radio (ESMR) such as radio-dispatched vehicles, or Personal Communications Services (PCS) which transmit voice, e-mail, video and data.

To satisfy the public's demand for services and to generate revenue, the Federal Communications Commission (FCC) has been and is presently in the process of auctioning licenses for additional broadband and narrow band frequencies servicing the new Personal Communications Services (PCS) technology which includes, in addition to the current analog voice transmission, digital voice transmission and video and data transmission capabilities. Based on anticipated sales of these licenses, San Francisco can reasonably anticipate about eight providers of cell phone and PCS services. Based on information currently available to the Department, San Francisco can reasonably expect about 175 additional applications for the installations of mobile telephone facilities. Based on the anticipated numbers of applications by six providers, San Francisco can expect around 300 cell sites over the next 10 years. (A similar number of two-way paging companies using narrowband spectrum will likely seek to build systems in the City.) The exact number of additional installations which will be required for each provider throughout the City is unknown at this time. It is anticipated, however, that as the number of customers of each provider increases and use of their radio frequency increases within a particular geographic service area, there may be a need to place the antennae closer than previously anticipated to maximize capacity and, therefore, to service its customers properly. In the neighborhoods with greater number of callers, such as the Financial District and higher density residential districts, more antennae installations can be expected.

Presently, five companies, shown in Table 1 below, provide Wireless Telecommunications Services (WTS) to the general public in San Francisco. These companies currently provide their service with 72 WTS facilities (antennae and transceiver/ relay systems). An additional 22 sites have approved permits but are not yet constructed or operational. The technology for cell phone systems currently require multiple land-based antennae and relay stations throughout the City which transmits the mobile call as the caller moves about the City and which links each company's citywide network to its' network outside the City. The FCC is currently auctioning a third (and final) 30 Megahertz (MHz) spectrum radio frequency band that could accommodate the cellular\PCS service and it is expected that the PCS 2000 company will win the bid in this auction.





## Research Sources

This report was research by Planning Department staff with the assistance of neighborhood representatives who provided comments, concerns, research papers and anecdotal testimony, written materials provided by industry sources, review of regulations and standards adopted by other jurisdictions, and interviews of City agency representatives. A great deal of information was derived by a report prepared by the San Diego Association of Governments (SANDAG) and published in December 1995, entitled "Wireless Communications Facilities Issues Paper". A copy of the SANDAG report as well as these Guidelines are available for public review at the Main Public Library, government documents section, as well as at the Planning Department. For review of the Department's Telecommunications Library, please contact planner Susana Montana at (415) 558-6421 or e-mail address [Susana\\_Montana@CI.SF.CA.US](mailto:Susana_Montana@CI.SF.CA.US). These Guidelines are also available on the ABAG (Association of Bay Area Governments) Homepage at <http://www.abag.ca.gov>.

**TABLE 1**

### EXISTING WIRELESS TELECOMMUNICATION SERVICE COMPANIES WITH ESTIMATED SITE REQUIREMENTS, May 1996.

	<i>Cellular</i>	<i>PCS</i>	<i>ESMR</i>	<i>Totals</i>
<i>Existing carriers presently operating in San Francisco:</i>	CellularOne GTE Mobilnet	PacBell MS Sprint Spectrum	Nextel	
<i>Existing/Activated Sites (Total):</i>	63	0	9	72
<i>Existing Building Mounted:</i>	57	0	7	64
<i>Existing Monopoles:</i>	6	0	0	6
<i>Existing Other:</i>	0	0	2	
<i>Estimated (by providers--10 yrs) additional sites to infill or for full build-out (include permitted but not activated):</i>	17	90	16	123
<i>Estimated (by providers--10 yrs) sites at total build-out:</i>	80	90	25	195

Source: Private providers

## Section 2. Public Concerns

Numerous residents, neighborhood groups, citywide civic groups and organizations, City agencies, and other interested parties have expressed concerns with WTS facilities in the City. Among the concerns expressed are:

### Health and Safety

- Concern with long-term adverse health effects of electromagnetic radiation (EMR) and radio frequency radiation (RF) associated with 24-hour operation of WTS installations which are in close proximity to residential units or to vulnerable populations such as young children, frail elderly, ill persons or pregnant women;

The first part of the report is a general introduction to the project. It describes the purpose of the study, the objectives, and the scope of the work. The second part is a literature review, which discusses the current state of knowledge in the field. The third part is a description of the methodology used in the study. The fourth part is a presentation of the results, and the fifth part is a conclusion and discussion of the findings.

Table 1: Summary of Results		Table 2: Detailed Data	
Parameter	Value	Parameter	Value
1	10	1	10
2	20	2	20
3	30	3	30
4	40	4	40
5	50	5	50
6	60	6	60
7	70	7	70
8	80	8	80
9	90	9	90
10	100	10	100

The results of the study show that the proposed method is effective in achieving the objectives of the study. The findings are consistent with the previous research in the field. The study has several limitations, and further research is needed to address these issues. The study has several strengths, and the findings are valuable for the field.



- Dissatisfaction with current inconclusive research on long-term human health effects of exposure to EMR and RF emissions from WTS installations and lack of conclusive human epidemiological studies and findings regarding this exposure;
- Dissatisfaction with Federal safety standards for EMR due to perceived undue influence of telecommunications industry representation on the Boards that selected the FCC adopted standards;
- General skepticism regarding telecommunications industry claims of no adverse effects of WTS facilities and likening these claims to previous claims of no harmful effects from aerosol spray (to the ozone layer), of second-hand smoke, of lead paint, or of asbestos insulation; and
- Concern that if antennas are loosened by vandals or an earthquake, they can fall on passersby or the altered panel can "beam" a signal, and any associated EMR, toward a habitable unit.

### Visual/Aesthetics

- Proliferation of antennae and "back up" equipment on a particular building which can be viewed from the street and/or which impede views from adjacent residential units or public view corridors (antennae farms);
- Concern with potential visual clutter in certain neighborhoods where there may be many users and each carrier will want to install numerous antennae to increase the capacity of their system; and
- Concern that carriers will not remove visually intrusive WTS facilities that are obsolete or that they are not using for normal service.

### Costs

- Concern that the industry should pay all the costs associated with City agency monitoring of health and safety conditions of approval as well as the costs of interdepartmental coordination of telecommunications policies and monitoring/enforcement activities;
- Concern that the industry should pay all costs associated with the City's Department of Public Health(or other appropriate City agency) to review scientific literature on health and safety issues related to WTS installations and to analyze and summarize that research and report to the Planning Commission and any other permitting City agency on an annual basis; and
- Concern that the industry should pay all the direct and indirect costs associated with the installation of telecommunications facilities in the City's right-of-way including the costs of street cuts and repair and maintenance of streets that have been altered for these installations.

In connection with the concerns identified above, many interested parties have requested the City to:

- Practice "prudent avoidance" and deny WTS facility applications until such time that conclusive scientific evidence shows that these facilities pose no harm to the public;
- Require carriers to indemnify the City for any adverse health effects associated with permitted WTS facilities that may in the future be proven, based on conclusive scientific research, to be harmful to humans; and

The first part of the report discusses the background of the project and the objectives of the study. It also outlines the scope of the work and the limitations of the study.

The second part of the report describes the methodology used in the study. It includes a detailed description of the data collection methods and the analysis techniques used.

The third part of the report presents the results of the study. It includes a detailed description of the findings and a discussion of the implications of the results.

The fourth part of the report discusses the conclusions of the study and provides recommendations for future research. It also includes a list of references and an appendix.

The fifth part of the report is a summary of the findings and a conclusion. It includes a list of references and an appendix.

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•In effect, declare a total moratorium on approving installations until there is a comprehensive "Master Plan" to address land use implications of the WTS technology.

### Benefits

•It is vital to the City's long-term economic health that wireless communications systems are developed throughout the City and are made accessible and affordable to the City's residents, businesses and visitors. These facilities can help local businesses to market their goods and services globally and to improve their productivity;

•The wireless communications industry is one of the fastest growing segments of the telecommunications industry, creating hundreds of jobs for local residents; and

•Wireless communications have proven invaluable in many emergencies, such as earthquakes, fires or floods. Public safety personnel rely on wireless phones to coordinate emergency services.

In connection with the public concerns and the position of the various Project Sponsors, the Commission has requested legal advice from the City Attorney as to whether the Commission has the power to preclude such uses/installations through a moratorium as requested by some members of the public. Based on the advice of counsel, the Commission has determined that both Federal and State law (as discussed below) allow reasonable regulation of the technology, but preclude blanket disapproval of projects. It is noted, however, that despite the Federal preemption of the February 8, 1996 Telecommunications Act, the City of Medina, Washington, on February 13, 1996, passed a Resolution imposing a six month moratorium on the issuance of permits for communication facilities in order to study issues related to the siting of these facilities (eg. to allow tall towers and to require co-location/sharing of the city's limited number of available sites). In May 1996, the United States District Court reviewed a request for an injunction on the city's moratorium submitted by a telecommunications carrier (Sprint) and the Court denied the request for an injunction because the six month moratorium would not cause "irreparable harm" and did not in other ways violate the Telecommunications Act.

The Planning Commission has also sought the input of the Department of Public Health (DPH) regarding health concerns and DPH has concluded that: "After thoroughly reviewing the available scientific data, DPH staff has concluded that the data do not indicate that exposures to RF radiation below the ANSI standard results in adverse health effects. Available scientific evidence supports the exposure levels recommended in the ANSI Standard. Further, other national and international standards, such as the NCRP, WHO, British, German, Finnish and Canadian Standards are consistent with and support the exposure levels recommended in the ANSI Standard." [DPH letter dated January 26, 1996, on file with the Planning Department].

In light of this advice, the Commission has decided to move forward with the review of outstanding permit applications related to this technology consistent with applicable law. However, in light of the concerns expressed by the public, the Commission urges the appropriate City authorities to empower the Department of Public Health to continue to review scientific literature and research findings and to report to the Planning Commission on an annual basis any significant developments that could require the Commission and/or the City to revisit and/or amend these policies and guidelines.

### Section 3. Wireless Technology





Mobile phone and personal pager calls are transmitted through the air via radio waves at various frequencies. Cellular transmissions differ from television and radio transmission in that cellular depends on a network of small receiving and transmission stations (cell sites) spread out over the service area whereas television and radio rely on one tower to provide service throughout a large region.

Calls from cellular hand sets send radio signals to the closest cell site. Each cell site has a base station with a transmitter and receiver. Each base station communicates with the company's switching office to send the signal to a "hard wired" phone or send the signal to another mobile phone through a series of cell sites. As a mobile caller moves about the service area, the signals are "handed off" to the nearest cell site. Microwave radio frequencies are used to coordinate the switching of signals among the cell sites. The radio signals from the cell site base station is directed toward the adjacent cell sites in a beam that is relatively narrow in the vertical plane. The beam must be uninterrupted by buildings or other obstructions, that is, it must have "line of sight" transmission to the next cell site.

In empty space, radio waves spread at the same speed as light. To create radio waves a transmitter must send pulses at an extremely fast rate--from many thousands to millions of cycles a second. A single wave is called a cycle. Frequencies are stated in cycles a second, or hertz. Thus, a frequency of one kilocycle a second, or one kilohertz, is 1,000 waves a second. One megacycle a second, or one megahertz (MHz) is one million waves a second. Waves of different lengths can cross or even travel along the same lines without mixing. Thus, many stations can operate in the same region without interference if their frequencies are different. The government insures that they will be different by giving exclusive use of a separate, specific frequency to each station in a region.

The cellular phone industry is limited by the Federal Communications Commission (FCC) to 45 MHz of radio spectrum bandwidth, which without reuse, would limit each company to 396 frequencies or voice channels. In order to increase calling capacity, these low power facilities "reuse" frequencies on the electromagnetic spectrum.

Historically, cellular phones have used analog transmission signals. In the analog technology, voice messages are electronically replicated and amplified as they are carried from the transmitting antenna to the receiving antenna. A problem with this technology is that the amplification procedure tends to pick up "noise", sometimes making the message difficult to hear. In order to diminish this noise and to provide greater capacity per channel, the cellular industry is beginning to switch to digital transmission signals. In the digital technology, voice messages are converted into digits (zeros and ones) that represent sound intensities at specific points in time. Because natural pauses in conversation are eliminated, more calling capacity becomes available from the same amount of spectrum and the background noise of analog calls is eliminated. However, due to the digital technology's higher frequencies on the electromagnetic spectrum, the digital cell phone system (Personal Communications Systems-PCS) will have a smaller radii than cellular sites and will require more transmission sites than the analog cellular system. Based on projections by the current service providers, San Francisco can expect a total of approximately 300 cell sites over the next ten years.

In a highly dense city like San Francisco, cell sites will tend to be spaced closer together than in suburban or rural areas due to the fact that there are more people, thus more potential wireless users. In San Francisco, the pattern of cell development will consist of numerous small cell sites in the downtown and commercial areas and fewer large cell sites in more residential and open space areas. As more people demand wireless service, there will be the need for additional sites to handle the calls.

A wireless network for San Francisco has two primary functions. First, to provide the necessary coverage for the entire city. Second, to provide the necessary capacity to satisfy the demand for calls at any one





time throughout the entire city. Traffic jams on the radio waves for cellular phone use would discourage the growth of the industry and the development of more advanced technology and could disable local emergency communications systems. The dual requirements of coverage and capacity necessitate the need for multiple low-powered sites throughout San Francisco.

*Coverage* sites expand service in large areas or in areas with difficult terrain and allow users to make and maintain calls as they travel between calls. *Capacity* sites increase the number of calls when the surrounding sites have reached their practical channel limit.

Sites must be located throughout the City so that continuous and seamless coverage and adequate coverage in every neighborhood will be ensured. Currently, each wireless company licensed to provide service in San Francisco will require sites at locations throughout the City.

Digital wireless facilities will have higher calling capacities than analog cellular cell sites. However, due to the higher frequencies on the electromagnetic spectrum (1,850 to 2,200 MHz versus 800 to 900 MHz), each PCS cell site will cover a smaller area. [Please also refer to the report entitled "Wireless Communications Facilities Issues Paper" published in December 1995 by the San Diego Association of Governments (SANDAG) available at the Main Public Library, government documents section, or at the Planning Department.]

## Section 4. Regulatory Framework

WTS facilities are regulated at the federal, state and local level.

### Federal Law

#### Federal Communication Commission

The Federal Communications Commission (FCC) is an independent federal regulatory agency which answers directly to Congress. Established by the Communications Act of 1934, the FCC is charged with regulating interstate and international communications by radio, television, wire, satellite and cable. The Wireless Telecommunications Bureau (WTB) handles all FCC domestic wireless telecommunications programs and policies, except those involving satellite communications. Wireless telecommunications services include cellular telephones, Enhanced Specialized Mobile Radio (ESMR), personal paging, personal communication services (PCS), public safety, and other commercial and private radio services. The WTB regulates wireless telecommunications providers and licenses and serves as the FCC's principal policy and administrative resource with regard to federal auctions for the private use of public air waves. Portions of the frequency spectrum are allocated to specific uses (such as TV broadcast or cellular), and specific frequencies within that part of the spectrum are assigned to licensed operators.

Section 332 of the 1934 Act was revised by Congress in 1993 to refine federal regulatory policy governing commercial mobile radio services ("CMRS"), such as cellular companies, to ensure the development of an efficient federally regulated, competitive market. In revising Section 332, Congress sought to ensure regulatory parity among all CMRS providers because "the disparities in the current regulatory scheme [e.g. private mobile carriers are exempted from state and federal regulation of rates and entry while common carrier mobile services are not] could impede the continued growth and development of commercial mobile services." The Senate expressly found in its version of the bill that "State regulation can be a barrier to the development of competition in this market" and that "uniform national policy is necessary and in the public interest". The FCC has noted that the 1993 revisions make clear that "Congress intended . . . to establish a national regulatory policy for CMRS, not a policy that is





balkanized state-by-state." This national policy is designed to "foster the growth and development of mobile services that, by their nature, operate without regard to state lines as an integral part of the national telecommunications infrastructure."

The Act reserves to the states regulatory authority over "other terms and conditions." The House Report on the 1993 revisions specifically refers to "facilities siting issues (e.g., zoning)" as such "terms and conditions" within the state's purview.

### 1996 Federal Telecommunications Act

With the potential economic impact of the WTS industry on both the national economy and federal treasury, Congress, in the recently passed Telecommunications Bill, has further deregulated the industry in order to promote the availability of competing and affordable services. President Clinton signed the bill into law in February 1996.

Section 704 of the Act is entitled National Wireless Telecommunications Siting Policy. This Section, while preserving the local jurisdiction's control over the siting process, sets forth certain important limitations. States and localities cannot unreasonably discriminate among providers of various services, and they cannot take action that prohibits or has the "effect" of prohibiting the provision of wireless services. The legislative history of the bill specifically provides that "it is in the intent of this section that bans or policies that have the effect of banning personal wireless services or facilities not be allowed and that decisions be made on a case-by-case basis." States and localities must act on siting requests "within a reasonable period of time", taking all relevant factors into consideration. Determinations to deny wireless facilities must be in writing and supported by substantial evidence.

The 1996 Act prohibits States and localities from denying siting on the basis of Radio Frequency Radiation (RF) emissions so long as such facilities comply with the FCC's regulations concerning such emissions. The FCC regulations currently accept the American National Standards Institute (ANSI) Standards as the acceptable level of Electromagnetic Radiation (EMR) emissions for cellular phone, radio-dispatched mobile services (ESMR) and personal communications services (PCS) facilities.

The Act creates a cause of action for parties adversely effected by a locality's decision inconsistent with these provisions, and the Courts are directed to hear and decide such action on an expedited basis.

### Safety Standards

The FCC requires all transmitting facilities that it licenses to comply with the ANSI Standards for human exposure to radio frequency (RF) electromagnetic fields. The ANSI standard is considered a "consensus standards," agreed upon by committees composed of university, telecommunications industry and government representatives. The FCC currently requires cellular, ESMR and PCS providers to comply with ANSI Standards for radio frequency emissions as a condition of the license. The Act prohibits local jurisdictions from imposing more stringent safety standards than that accepted by the FCC.

Power density is a means of determining the level of exposure to RF and EMF emissions. Measurements of equipment can assure compliance with existing exposure standards. The current ANSI Standard recommends general public exposure to EMR not to exceed 550 microwatts per square centimeters at the 800 MHz frequency for exposure of 30 minutes or more; of 567 microwatts per sq.cm. for 30 minutes or more at the 850 MHz frequency; and 600 microwatts per sq. cm. for 30 minutes or more at the 900 MHz frequency. By comparison, a 110 watt light bulb emits a power density of EMR of approximately 200 microwatts per sq.cm. at a distance of six feet.





## State Level

Although the Federal government controls the sale and use of the airwaves, States retain jurisdiction over other terms and conditions, including facility siting issues. Applicable State law places constraints on a local jurisdiction's exercise of its police power over WTS facilities.

The California Public Utility Commission (CPUC) has jurisdiction over the provision of many utility services, including wireless telephone. The CPUC has broad powers to regulate safety and standards of service. Enhanced Special Mobile Radio (ESMR) licensees operate private systems, over which the CPUC has no jurisdiction pursuant to federal legislation.

The standard applied by the CPUC in issuing a Certificate of Public Convenience and Necessity ("CPC&N") required to operate a cellular system is whether the proposed facilities will serve the public convenience and necessity.

There was much confusion concerning the interplay between the CPUC's regulatory authority and local zoning when cellular systems were first authorized and constructed in the early 1980s. Some providers took the view that the issuance by the CPUC of a CPC&N eliminated the need to obtain local permits. The issue was resolved with the CPUC's issuance of General Order ("GO") 159, which specifically requires the provider to obtain permits from the local jurisdiction, and provides an appeal mechanism if an accommodation cannot be reached.

Early in the development of the cellular system, the CPC&N's expressly authorized specific sites. In the case where the PUC has approved a specific site in an application for a CPC&N, the local jurisdiction cannot refuse to issue necessary permits, though it may attach conditions as long as those conditions do not render the site infeasible.

Today, it is much more likely the case that a cellular provider is seeking a permit for a new facility not specified in its CPC&N, but within the geographic area it is mandated by its' FCC license to serve. In such cases the provider must apply to the local jurisdiction for needed permits. By providing a preemptive appeal as set forth in GO 159, however, the CPUC assures that the public convenience and necessity will not be frustrated by local permit procedures which may prohibit or unreasonably restrict needed cellular facilities.

## Local Level

The San Francisco Planning Code allows communication utilities such as commercial wireless transmitting, receiving or relay facilities, such as radio, television, paging or cellular antennas and base stations, to be located in various parts of the City. Such facilities are allowed as a Principal Use in Commercial and Industrial Districts when the facility meets certain height and distance from residences criteria and allows their installation as a conditional use in these districts if they do not meet those criteria. In addition, antennas are allowed as a conditional use in Residential and mixed Residential-Commercial Districts.

The Planning Department and Planning Commission has relied on this process of administrative review of antennas in some Districts and Planning Commission Conditional Use review of antennas in other Districts for decades. However, with the proliferation of such facilities in the past year and the anticipation of a greater number of applications in the near future, the land use implications of such facilities have changed and require greater scrutiny and regulation.





Early in the 1950's tall towers were required to transmit television and radio waves and small antennas were required on buildings to receive these waves for individual customers. In the 1970's, satellite dish antennas were required to transmit or receive radio, television and electronic data from homes and businesses to distant receiving or transmission stations. Now, in the 1990's, very few tall radio and television towers are required in the City. Numerous satellite dish antennas are needed by businesses to transmit data to off-site facilities or to send their product electronically to the next contractor or to the customer. For example, desktop publishers transmit their finished copy electronically through the air waves to printing companies in the Mid-West. More often, companies will send their product to their customer electronically through fiber optic "hard wires" or coaxial wire transmission lines. Cable television is commonplace in homes throughout the City and cable/digital radio is gaining in popularity. In the next few years, it can be expected that most businesses and many residents will be using both hard wire electronic communication systems (computers, facsimile machines, cable television and radio) and wireless communication systems (cellularphones, pagers, satellite dish radio and television, facsimile and video communications, etc.). The number, size, location and types of wireless communication facilities, including antennas, will change dramatically over the next decade. The trends indicate that the facilities will become more numerous and smaller over time.

The land use implications for these wireless communications facilities, including PCS antennas, generally reflect the same concerns addressed over the years by the Planning Department and Planning Commission, including:

- Land use compatibility with residential uses regarding noise associated with 24-hour operation of the facility;
- Land use compatibility with other transmission facilities such that new systems do not interfere with existing facilities and harm existing businesses;
- Health concerns associated with potential exposure to Electromagnetic Radiation and Radio Frequency radiation;
- Urban design concerns related to visual obstruction, view blockage, and compatibility with architectural character of the building and neighborhood;
- Facilitating economic development and vitality of businesses in the City which depend on these technologies;
- Create new job opportunities for San Franciscans; and
- Providing sufficient facilities to serve residents, visitors and workers with the technological amenities they desire for modern livability (such as television, radio, cell phone and beepers).

Section 100.2(g) of the **June 1954** Planning Code allowed "wireless transmission towers" as a Conditional Use in Residential [R-1, R-2, R-3, R-4 and R-5] Districts and in Commercial [C-1, C-2, and C-3--Sec. 111.2(c)] Districts. In 1954, antennas were lumped into the same land use category as utility installations, public service facilities, landing fields for aircraft, and railroads. The 1954 Code allowed antennas as a Principal Use in Industrial M-1 and M-2 Districts and included them in the same land use category as landing fields for aircraft, railroad facilities and steam power plants. The "wireless transmission towers" of the 1950's featured tall steel towers for television and radio wave transmission





and reception. There were very few constructed throughout the City.

The 1974 Planning Code continued the 1954 Code provisions for wireless transmission towers. Section 201.2 of the 1974 Planning Code continued to lump antennas into the land use category of utility installation, public service facility, landing field for aircraft, and railroad facilities for Residential Districts. However, the Commercial and Industrial Districts received a new category under Section 227(h) of "wireless transmission facility". The 1974 Planning Code required Conditional Use authorization for antennas in Residential, Residential-Commercial, and Commercial Districts and allowed them as a Principal Use in Industrial (M-1 and M-2) Districts.

Section 209.6 (b) of the **current** San Francisco City Planning Code (1985 to date) allows communication facilities, such as transmitting and receiving antennae, as a Conditional Use in Residential and mixed Residential-Commercial Districts. Receiving-only antennae have been deemed by the Zoning Administrator as an "accessory use" to the building occupant. Private carrier owned and operated receiving and transmitting facilities are deemed by the Zoning Administrator to be a separate commercial establishment subject to the applicable zoning regulations as described herein.

Section 227(h) of the Planning Code also allows "commercial wireless transmitting, receiving or relay facilities, including towers, antennae, and related equipment for the transmission, reception, or relay of radio, television, or other electronic signals" as a Principal use in Commercial and Industrial Districts if certain height and distance to residential uses criteria are met. Section 227(i) of the Code allows these facilities in Commercial and Industrial Districts as a Conditional Use if the criteria and provisions of Section 227(h) cannot be met.

Article 7 and 8 of the Planning Code requires Conditional Use authorization for commercial wireless transmitting, receiving or relay facilities in Neighborhood Commercial and Mixed Use (Chinatown and South of Market) Districts.

Article 9 (Mission Bay) allows communication facilities, as defined by Section 209.6(b), as a principle use in the Moderate Density and High Density Residential Districts and prohibits them in the Lower Density Residential District. Section 943 describes how rooftop WTS facilities should be screened from view. Article 9 allows WTS facilities as a conditional use in Mission Bay Neighborhood Commercial Districts and allows them as a principle use in the Mission Bay Office and Commercial-Industrial Districts. They are not permitted in the Mission Bay Hotel District.

WTS facilities owned and operated by a private carrier on a public property which lies within a P-Public District are permitted only as a conditional use pursuant to Section 234.2(a) of the Planning Code. Publicly-owned and operated WTS facilities on public property in P Districts have been deemed by the Zoning Administrator to be a public use permitted as a principal use, pursuant to Section 234 of the Planning Code. However, any change of use on a public property or a public right-of-way, including the installation of a WTS facility, requires a finding of consistency with the City's Master Plan by the Planning Commission or, through administrative review, by the Director of Planning or Zoning Administrator (Master Plan Referral process). Certain conditions of approval can be attached to a finding of consistency with the Master Plan by the Planning Commission or the Department as well as through the Building Permit Application review of Section 101.1 of the Planning Code (Prop. M findings) process.

In addition, Section 260(b)(2)(I) of the Planning Code exempts towers and antennas from the height limitations of a particular zoning district although it does not exempt the "back up" equipment (receiving, transmitting, power supply, cooling/air conditioning equipment generally located within one box, room or shelter).





Local businesses and residents will demand new technologies. These new technologies will require new criteria for the siting of wireless communication facilities. As these arise, new siting policies and measures to mitigate potential adverse affects of new WTS technologies should be adopted as standards for Planning Department administrative review and for Planning Commission Conditional Use review.

## **Section 5. Master Plan Policies Relevant to Wireless Telecommunication Services**

Although the types of WTS facilities that are the subject of these Guidelines did not exist when the City's Master Plan was last amended in whole in 1988, many of the Plan policies are relevant to the development of siting criteria and policies for WTS facilities. The most relevant sections are found in the Urban Design, Commerce and Industry and Residence Elements. Suggested policies for WTS Facilities (see page 24 of these Guidelines), once fully refined, could be included within the Community Facilities Element of the Master Plan.

### **Urban Design Element**

The Urban Design Element is concerned both with development and with preservation. It is a concerted effort to recognize the positive attributes of the city, to enhance and conserve those attributes, and to improve the living environment where it is less than satisfactory. The Plan is a definition of quality, a definition based upon human needs.

#### **OBJECTIVE 1**

**EMPHASIS OF THE CHARACTERISTIC PATTERN WHICH GIVES TO THE CITY AND ITS NEIGHBORHOODS AN IMAGE, A SENSE OF PURPOSE, AND A MEANS OF ORIENTATION.**

#### **Image and Character**

##### **POLICY 1**

Recognize and protect major views in the city, with particular attention to those of open space and water.

##### **POLICY 3**

Recognize that buildings, when seen together, produce a total effect that characterizes the city and its districts.

#### **OBJECTIVE 2**

**CONSERVATION OF RESOURCES WHICH PROVIDE A SENSE OF NATURE, CONTINUITY WITH THE PAST, AND FREEDOM FROM OVERCROWDING.**

### **Natural Areas**

##### **POLICY 1**

Preserve in their natural state the few remaining areas that have not been developed by man.

##### **POLICY 2**

Limit improvements in other open spaces having an established sense of nature to those that are necessary, and unlikely to detract from the primary values of the open space.

### **Richness of Past Development**





**POLICY 4**

Preserve notable landmarks and areas of historic, architectural or aesthetic value, and promote the preservation of other buildings and features that provide continuity with past development.

**POLICY 5**

Use care in remodeling of older buildings, in order to enhance rather than weaken the original character of such buildings.

**POLICY 6**

Respect the character of older development nearby in the design of new buildings.

**Street Space****POLICY 8**

Maintain a strong presumption against the giving up of street areas for private ownership or use, or for construction of public buildings.

**POLICY 9**

Review proposals for the giving up of street areas in terms of all the public values that streets afford.

Every proposal for the giving up of public rights in street areas, through vacation, sale or lease of air rights, revocable permit or other means, shall be judged with the following criteria as the minimum basis for review:

a. No release of a street area shall be recommended which would result in:

- (1) Detriment to vehicular or pedestrian circulation;
- (2) Interference with the rights of access to any private property;
- (3) Inhibiting of access for fire protection or any other emergency purpose, or interference with utility lines or service without adequate reimbursement;
- (4) Obstruction or diminishing of a significant view, or elimination of a viewpoint; industrial operations;
- (5) Elimination or reduction of open space which might feasibly be used for public recreation;
- (6) Elimination of street space adjacent to a public facility, such as a park, where retention of the street might be of advantage to the public facility;
- (7) Elimination of street space that has formed the basis for creation of any lot, or construction or occupancy of any building according to standards that would be violated by discontinuance of the street;
- (8) Enlargement of a property that would result in (i) additional dwelling units in a multi-family area; (ii) excessive density for workers in a commercial area; or (iii) a building of excessive height or bulk;
- (9) Reduction of street space in areas of high building intensity, without provision of new open space in the same area of equivalent amount and quality and reasonably accessible for public enjoyment;
- (10) Removal of significant natural features, or detriment to the scale and character of surrounding





development.

(11) Adverse effect upon any element of the Master Plan or upon an area plan or other plan of the Department of City Planning; or

(12) Release of a street area in any situation in which the future development or use of such street area and any property of which it would become a part is unknown.

b. Release of a street area may be considered favorably when it would not violate any of the above criteria and when it would be:

(1) Necessary for a subdivision, redevelopment project or other project involving assembly of a large site, in which a new and improved pattern would be substituted for the existing street pattern;

(2) In furtherance of an industrial project where the existing street pattern would not fulfill the requirements of modern industrial operations.

(3) Necessary for a significant public or semi-public use, where the nature of the use and the character of the development proposed present strong justifications for occupying the street area rather than some other site;

(4) For the purpose of permitting a small-scale pedestrian crossing consistent with the principles and policies of The Urban Design Element; or

(5) In furtherance of the public values and purposes of streets as expressed in The Urban Design Element and elsewhere in the Master Plan.

#### POLICY 10

Permit release of street areas, where such release is warranted, only in the least extensive and least permanent manner appropriate to each case.

#### OBJECTIVE 4

IMPROVEMENT OF THE NEIGHBORHOOD ENVIRONMENT TO INCREASE PERSONAL SAFETY, COMFORT, PRIDE AND OPPORTUNITY

#### FUNDAMENTAL PRINCIPLES FOR NEIGHBORHOOD ENVIRONMENT

#### POLICIES FOR NEIGHBORHOOD ENVIRONMENT

##### Health and Safety

#### POLICY 14

Remove and obscure distracting and cluttering elements.

Signs are another leading cause of street clutter. Where signs are large, garish and clashing they lose their value as identification or advertising and merely offend the viewer. Often these signs are overhanging or otherwise unrelated to the physical qualities of the buildings on which they are placed. Signs have an important place in an urban environment, but they should be controlled in their size and location.

Other clutter is produced by elements placed in the street areas. The undergrounding of overhead wires



should continue at the most rapid pace possible, with the goal the complete elimination of such wires within a foreseeable period of time. Every other element in street areas, including public signs, should be examined with a view toward improvement of design and elimination of unnecessary elements.

## **Commerce and Industry Element:**

### **GOALS**

The objectives and policies are based on the premise that economic development activities in San Francisco must be designed to achieve three overall goals:

1. **Economic Vitality:** The first goal is to maintain and expand a healthy, vital and diverse economy which will provide jobs essential to personal well-being and revenues to pay for the services essential to the quality of life in the city.
2. **Social Equity:** The second goal is to assure that all segments of the San Francisco labor force benefit from economic growth. This will require that particular attention be given to reducing the level of unemployment, particularly among the chronically unemployed and those excluded from full participation by race, language or lack of formal occupational training.
3. **Environmental Quality:** The third goal is to maintain and enhance the environment. San Francisco's unique and attractive environment is one of the principal reasons San Francisco is a desirable place for residents to live, businesses to locate, and tourists to visit. The pursuit of employment opportunities and economic expansion must not be at the expense of the environment appreciated by all.

These goals are interrelated and provide a perspective for evaluating future development issues in the city. All projects should be evaluated against all three goals in determining costs and benefits to the city's present and future population. The objectives and policies that follow seek to set a course for the city by which all three goals can be attained.

### **OBJECTIVES AND POLICIES**

#### **GENERAL / CITYWIDE**

##### **OBJECTIVE 1**

**MANAGE ECONOMIC GROWTH AND CHANGE TO ENSURE ENHANCEMENT OF THE TOTAL CITY LIVING AND WORKING ENVIRONMENT.**

##### **POLICY 1**

Encourage development which provides substantial net benefits and minimizes undesirable consequences. Discourage development which has substantial undesirable consequences that cannot be mitigated.

##### **POLICY 2**

Assure that all commercial and industrial uses meet minimum, reasonable performance standards.

A critical aspect of development management is to mitigate negative impacts created by new development: economic, aesthetic, physical, environmental, and social.

To ensure that commercial and industrial activities do not detract from the environment in which they locate, and may in fact benefit their surroundings, performance standards should be applied in evaluating





new developments. The policies of the Master Plan provide many of the standards to be used in evaluating development proposals. Other standards are found in various city ordinances and State and Federal laws. As necessary these standards should be reformed and additional standards developed.

OBJECTIVE 2  
MAINTAIN AND ENHANCE A SOUND AND DIVERSE ECONOMIC BASE AND FISCAL  
STRUCTURE FOR THE CITY.

POLICY 1  
Seek to retain existing commercial and industrial activity and to attract new such activity to the city.

POLICY 2  
Seek revenue measures which will spread the cost burden equitably to all users of city services.

POLICY 3  
Maintain a favorable social and cultural climate in the city in order to enhance its attractiveness as a firm location.

OBJECTIVE 3  
PROVIDE EXPANDED EMPLOYMENT OPPORTUNITIES FOR CITY RESIDENTS,  
PARTICULARLY THE UNEMPLOYED AND ECONOMICALLY DISADVANTAGED.

POLICY 1  
Promote the attraction, retention and expansion of commercial and industrial firms which provide employment improvement opportunities for unskilled and semi-skilled workers.

POLICY 2  
Promote measures designed to increase the number of San Francisco jobs held by San Francisco residents.

POLICY 3  
Emphasize job training and retraining programs that will impart skills necessary for participation in the San Francisco labor market.

POLICY 4  
Assist newly emerging economic activities.

INDUSTRY

OBJECTIVE 4  
IMPROVE THE VIABILITY OF EXISTING INDUSTRY IN THE CITY AND THE  
ATTRACTIVENESS OF THE CITY AS A LOCATION FOR NEW INDUSTRY.

POLICY 1  
Maintain and enhance a favorable business climate in the city.

POLICY 2  
Promote and attract those economic activities with potential benefit to the City.

Downtown Area Plan.





## SPACE FOR COMMERCE

### OBJECTIVES AND POLICIES

#### OBJECTIVE 1

MANAGE ECONOMIC GROWTH AND CHANGE TO ENSURE ENHANCEMENT OF THE TOTAL CITY LIVING AND WORKING ENVIRONMENT.

#### OBJECTIVE 2

MAINTAIN AND IMPROVE SAN FRANCISCO'S POSITION AS A PRIME LOCATION FOR FINANCIAL, ADMINISTRATIVE, CORPORATE, AND PROFESSIONAL ACTIVITY.

#### OBJECTIVE 3

IMPROVE DOWNTOWN SAN FRANCISCO'S POSITION AS THE REGION'S PRIME LOCATION FOR SPECIALIZED RETAIL TRADE.

#### OBJECTIVE 4

ENHANCE SAN FRANCISCO'S ROLE AS A TOURIST AND VISITOR CENTER.

#### OBJECTIVE 5

RETAIN A DIVERSE BASE OF SUPPORT COMMERCIAL ACTIVITY IN AND NEAR DOWNTOWN.

#### OBJECTIVE 12

CONSERVE RESOURCES THAT PROVIDE CONTINUITY WITH SAN FRANCISCO'S PAST.

#### POLICY 1

Preserve notable landmarks and areas of historic, architectural, or aesthetic value, and promote the preservation of other buildings and features that provide continuity with past development.

#### POLICY 2

Use care in remodeling significant older buildings to enhance rather than weaken their original character.

#### OBJECTIVE 13

CREATE AN URBAN FORM FOR DOWNTOWN THAT ENHANCES SAN FRANCISCO'S STATURE AS ONE OF THE WORLD'S MOST VISUALLY ATTRACTIVE CITIES.

#### POLICY 3

Create visually interesting terminations to building towers.

#### OBJECTIVE 14

CREATE AND MAINTAIN A COMFORTABLE PEDESTRIAN ENVIRONMENT.

#### POLICY 1

Promote building forms that will maximize the sun access to open spaces and other public areas.

#### POLICY 2

Promote building forms that will minimize the creation of surface winds near the base of buildings.



## OBJECTIVE 15

TO CREATE A BUILDING FORM THAT IS VISUALLY INTERESTING AND HARMONIZES WITH SURROUNDING BUILDINGS.

### POLICY 1

Ensure that new facades relate harmoniously with nearby facade patterns.

When designing the facade pattern for new buildings, the pattern of large nearby existing facades should be considered to avoid unpleasant juxtapositions. Incongruous materials, proportions, and sense of mass should be avoided.

As a general rule, facades composed of both vertical and horizontal elements fit better with older as well as most new facades.

### POLICY 5

Encourage the incorporation of publicly visible art works in new private development and in various public spaces downtown.

#### Public Art:

- Art in the public right-of-way is strongly encouraged throughout the downtown area. Art installations might range from sculptures, sidewalk inlays, and kiosk displays to performance art, dance pieces, and temporary installations.

- Empty storefronts should be utilized for temporary art installations to enliven the streetscape.

## NEIGHBORHOOD

## COMMERCE

## OBJECTIVE 6

MAINTAIN AND STRENGTHEN VIABLE NEIGHBORHOOD COMMERCIAL AREAS EASILY ACCESSIBLE TO CITY RESIDENTS.

### POLICY 1

Ensure and encourage the retention and provision of neighborhood-serving goods and services in the city's neighborhood commercial districts, while recognizing and encouraging diversity among the districts.

### POLICY 2

Promote economically vital neighborhood commercial districts which foster small business enterprises and entrepreneurship and which are responsive to economic and technological innovation in the marketplace and society.

### POLICY 3

Preserve and promote the mixed commercial-residential character in neighborhood commercial districts. Strike a balance between the preservation of existing affordable housing and needed expansion of commercial activity.

### POLICY 7

Promote high quality urban design on commercial streets.





## URBAN DESIGN GUIDELINES

The following guidelines for urban design are intended to preserve and promote positive physical attributes of neighborhood commercial districts and facilitate harmony between business and residential functions. The pleasant appearance of an individual building is critical to maintaining the appeal and economic vitality of the businesses located in it, as well as of the whole neighborhood commercial district. An individual project's building design and site layout should be compatible with the character of surrounding buildings and the existing pattern of development in neighborhood commercial districts.

In designing a new development or evaluating a development proposal, the following criteria should be considered:

- Overall district scale;
- Individual street character and form;
- Lot development patterns;
- Adjacent property usage, especially buildings historical, cultural or architectural importance;
- Proposed site development and building design;
- Handicapped access;
- Potential environmental impacts; and
- Feasible mitigation measures.

### Architectural Design

- The essential character of neighborhood commercial districts should be preserved by discouraging alterations and new development which would be incompatible with buildings which are of fine architectural quality and contribute to the scale and character of the district. The details, material, texture or color of existing architecturally distinctive buildings should be complemented by new development.
- Existing structures in sound or rehabilitable condition and of worthwhile architectural character should be reused where feasible to retain the unique character of a given neighborhood commercial district.
- The design of new buildings, building additions and alterations, and facade renovations should reflect the positive aspects of the existing scale and design features of the area. Building forms should complement and improve the overall neighborhood environment.
- Building design which follows a standardized formula prescribed by a business with multiple locations should be discouraged if such design would be incompatible with the scale and character of the district in which the building is located.

### Materials





·The materials, textures and colors of new or remodeled structures should be visually compatible with the predominant materials of nearby structures. In most neighborhood commercial districts, painted wood, masonry and tiles combined with glass panes in show cases, windows and doors are the most traditional and appropriate exterior wall materials.

### Details

·Individual buildings in the city's neighborhood commercial districts are rich in architectural detailing, yet vary considerably from building to building, depending upon the age and style of their construction. Vertical lines of columns or piers, and horizontal lines of belt courses or cornices are common to many buildings as are moldings around windows and doors. These elements add richness to a flat facade wall, emphasizing the contrast of shapes and surfaces.

·A new or remodeled building should relate to its surrounding area by displaying compatible proportions, textures, and details. Nearby buildings of architectural distinction can serve as primary references. Existing street rhythms should also be continued on the facade of a new building, linking it to the rest of the district.

### Rooftop Mechanical Equipment

·Rooftop mechanical equipment which may be visually obtrusive or create disturbing noises or odors should be located away from areas of residential use and screened and integrated with the design of the building.

### Signs

·The character of signs and other features attached to or projecting from buildings is an important part of the visual appeal of a street and the general quality and economic stability of the area. Opportunities exist to relate these signs and projections more effectively to street design and building design. Neighborhood commercial districts are typically mixed-use areas with commercial units on the ground or lower floors and residential uses on upper floors. Sign sizes and design should relate and be compatible with the character and scale of the building as well as the neighborhood commercial district. As much as signs and other advertising devices are essential to a vital commercial district, they should not be allowed to interfere with or diminish the livability of residences within the neighborhood commercial district or in adjacent residential districts. Signs should not be attached to facades at residentially-occupied stories nor should sign illumination shine directly into windows of residential units.

### POLICY 8

Preserve historically and/or architecturally important buildings or groups of buildings in neighborhood commercial districts.

### GOVERNMENT, HEALTH AND EDUCATION SERVICES

#### OBJECTIVE 7

ENHANCE SAN FRANCISCO'S POSITION AS A NATIONAL AND REGIONAL CENTER FOR GOVERNMENTAL, HEALTH, AND EDUCATIONAL SERVICES.

#### POLICY 1

Promote San Francisco, particularly the civic center, as a location for local, regional, state and federal



governmental functions.

Residence Element

NEIGHBORHOOD ENVIRONMENT

OBJECTIVE 12  
TO PROVIDE A QUALITY LIVING ENVIRONMENT.

POLICY 1

Assure housing is provided with adequate public improvements, services and amenities.

RESIDENTIAL PROJECTS

Exterior Appearance

·Design new and substantially altered buildings in a manner which conserves and protects neighborhood character (See "Residential Design Guidelines", Department of City Planning, November 2, 1989 for more specific guidelines and illustrations.)

·Relate the form and architectural character of new and substantially altered buildings to the general scale and character of surrounding buildings.

Environmental Factors

(Sunlight, topography, noise, and climate.)

·Expose all units to natural light.

·Insulate units from the intrusion of exterior and interior noise.

·Apply energy conservation measures in the design of the building.

Community Facilities Element

The Community Facilities Element contains no relevant policies at this time. However, it is anticipated that by June 30, 1998 a Telecommunications Facilities Master Plan could be incorporated within the Community Facilities Element of the City's General Plan.

Community Safety Element

OBJECTIVES AND POLICIES

EMERGENCY OPERATIONS

OBJECTIVE 3  
ENSURE THE PROTECTION OF LIFE AND PROPERTY FROM THE EFFECTS OF FIRE OR  
NATURAL DISASTER THROUGH ADEQUATE EMERGENCY OPERATIONS PREPARATION.

POLICY 1





Maintain a local agency for the provision of emergency services to meet the needs of San Francisco.

#### POLICY 2

Develop and maintain viable, up-to-date in-house emergency operations plans, with necessary equipment, for operational capability of all emergency service agencies and departments.

#### POLICY 3

Maintain and expand agreements for emergency assistance from other jurisdictions to ensure adequate aid in time of need.

#### POLICY 4

Establish and maintain an adequate Emergency Operations Center.

#### POLICY 5

Maintain and expand the city's fire prevention and fire-fighting capability.

#### POLICY 6

Establish a system of emergency access routes for both emergency operations and evacuation.

#### Environmental Protection Element

#### OBJECTIVE 10

##### MINIMIZE THE IMPACT OF NOISE ON AFFECTED AREAS.

The process of blocking excessive noise from our ears could involve extensive capital investment if undertaken on a systematic, citywide scale. Selective efforts, however, especially for new construction, are both desirable and justified.

#### POLICY 1

Promote site planning, building orientation and design, and interior layout that will lessen noise intrusion.

#### POLICY 2

Promote the incorporation of noise insulation materials in new construction.

#### OBJECTIVE 14

##### PROMOTE EFFECTIVE ENERGY MANAGEMENT PRACTICES TO MAINTAIN THE ECONOMIC VITALITY OF COMMERCE AND INDUSTRY.

#### POLICY 1

Increase the energy efficiency of existing commercial and industrial buildings through cost-effective energy management measures.

#### POLICY 5

Encourage use of integrated energy systems.

#### Transportation Element

The Transportation Element contains no relevant policies.

#### Arts Element





## GOAL I. SUPPORT AND NURTURE THE ARTS THROUGH CITY LEADERSHIP

### OBJECTIVE 1

RECOGNIZE THE ARTS AS NECESSARY TO THE QUALITY OF LIFE FOR ALL SEGMENTS OF SAN FRANCISCO.

#### POLICY 1

Promote inclusion of artistic considerations in local decision-making.

### OBJECTIVE 2

INCREASE THE CONTRIBUTION OF THE ARTS TO THE ECONOMY OF SAN FRANCISCO.

### OBJECTIVE 3

DEVELOP AND EXPAND ONGOING PARTNERSHIPS WITH THE PRIVATE SECTOR IN SUPPORT OF THE ARTS.

#### POLICY 1

Develop partnerships with the private sector and the business community to encourage monetary and non-monetary support of the arts, as well as sponsorships of arts organizations and events.

## Section 6. Quality of Life Considerations Associated with WTS Facilities

A number of health, safety and quality of life concerns have been raised regarding the siting of WTS facilities in the City. These concerns include:

- Visual impacts of both antennae and "back up" equipment (transceivers, air conditioning, switching and power equipment). How many is "too many"? How can we avoid the "antennae farm" visual impacts of too many on any one building?
- How can we mitigate the visual impact of numerous antennas on any one street or neighborhood, particularly in residential areas or in view corridors?
- How can we measure "visual clutter" by WTS facilities; how can we tell when the City has reached a saturation point and cannot accept new such facilities without great visual and aesthetic harm?
- How can we recommend and encourage replacement of older, larger antennae if new technology develops smaller antennae over time?
- What type of treatments (ie. selective placement, setbacks on roofs, painting, screening, etc.) can make these facilities less visually obtrusive?
- How can we protect architecturally significant buildings from visually distracting elements associated with the siting of these facilities?
- How are warning signs near installations lit at night? Would this produce glare to nearby residents?
- How can we insure that the antennae do not incorporate a company logo or some other form of advertising sign?



- How can the City monitor each installation for compliance with FCC/ANSI Standards?
- How do we insure that all antenna sites incorporate multi-lingual warning signs and fence/barriers to prevent un-trained workers, tenants and the general public from entering dangerous areas?
- Can the Planning Commission require landlords to advise prospective tenants in writing of the presence of PCS antennae on the premises (so people can choose not to rent)?

## Section 7. Proposed WTS Facilities Siting Policies

The following policies and guidelines attempt to address, to the extent possible, the concerns raised by the public.

### Land Use

#### LU1

Insure that the siting of Wireless Telecommunications Services (WTS) Facilities is compatible with nearby uses. WTS facilities should meet Federal Communications Commission ( FCC) health and safety standards. Operation of new facilities should not cause interference with existing nearby facilities such that the existing facility would be required to increase its power source or other equipment to continue proper service. These potential impacts should be considered, measured and mitigated prior to approval of a new facility.

#### LU2

Insure that the type of WTS facility is compatible with the scale of the locale or, if it is out of scale, is (1) determined to be necessary at that location for the Applicant's operational needs; (2) meets the criteria of Section 303(c) of the Planning Code; and(3) incorporates all feasible measures to ameliorate visual intrusion or other adverse impacts. Whenever feasible, design out-of-scale facilities as public art rather than obtrusive utilities.

#### LU3

Insure that the facility is sited on a structure in such a way as to minimize visual obstruction. Sites to be considered, in order of preference, are: (1) Public buildings, structures, utilities, or other neighborhood institutions; (2) Industrial or commercial buildings where existing visual obstructions/clutter will be removed; (3) Industrial or commercial buildings where existing visual obstructions/clutter cannot, in a commercially reasonable and viable manner, be removed; (4) Residential buildings which exceed the height limit where existing visual obstructions/clutter will be removed; (5) Residential buildings which exceed the height limit and where the back-up equipment is installed within the building envelope or installed in such a way as to minimize visual obstruction; or (6) Residential buildings which are at or below the allowable height limit.

#### LU4

Protect landmark structures, historically-significant structures, architecturally-significant structures, landmark vistas or scenery, and view corridors from visually-obtrusive WTS antennas and "back-up" equipment.

#### LU5

Protect natural resources, open spaces, recreational trails and/or other recreational resources from intrusion from installation of unmitigated WTS facilities such that emissions, lighting, signage or barriers





would diminish the value and/or public access to those resources.

#### LU6

Insure that the siting of any WTS facility will be subject to development requirements that will mitigate any potential health, safety, urban design, neighborhood character or public access impacts and insure that the installation will positively address the 8 priority policies of Section 101.1 of the City Planning Code (Prop M policies).

### Urban Design

#### UD1

Protect the urban design, scale, architectural character and visual continuity of the neighborhood by siting WTS facilities on buildings and in such a way that would minimize visual obtrusion and protect the vistas and beauty of San Francisco. WTS facilities should be made as unobtrusive as possible, consistent with the reasonable technological requirements of the facility. No advertising sign or identifying logo should be displayed on any WTS facility or element. Antenna panels should not reflect light. The Department or Commission should review applications to determine when a locale or building is approaching the maximum number of WTS facilities such that the locale or site is not overwhelmed with facilities and/or the site is perceived to becoming an "antennae farm" or too "busy" and visually distracting.

#### UD2

Require Applicants to develop and submit with their Application a 5 year plan generally describing the services to be provided within the City, each service area within the City, and the size, type and number of facilities anticipated for each service area within the 5 year period.

#### UD3

When reasonably possible and commercially practicable, remove existing visual obstructions/clutter on the rooftop or roofline on a permanent basis associated with the installation of WTS facilities in the City.

### Health and Safety

#### HS1

The Applicant should pay all reasonable costs associated with the measuring, recording, reporting and monitoring of emissions, including noise, EMR/RF, and thermal, associated with the WTS facility at all locations. Such information should be made available to any interested party through the Applicant's Neighborhood Liaison. All such records would be available for public review in City records.

#### HS2

The Department of Building Inspection has the responsibility to insure that the installation site is structurally-sound and is seismically-safe for the proposed equipment.

#### HS3

The City should insure that emergency telecommunication services are available on a priority basis to the appropriate agencies in the event of a disaster or emergency; that is, if the system is rendered inoperable by a disaster, carriers shall be required to work closely with the City's Office of Emergency Services (or its' equivalent) to restore emergency City services as quickly as is possible. The installations should not interfere with any City emergency service telecommunications system.

#### HS4

The Applicant should insure that the WTS facilities are sited in such a way as to comply with any





FCC-adopted safety standards governing controlled and uncontrolled access to the facility. Facilities should have barriers to prevent unauthorized access. Signs in several languages as may be required by any FCC-adopted standards should be posted, to advise people of the presence of equipment emitting electromagnetic radiation and radio frequency radiation and to warn people not to approach this equipment.

## Community Involvement

### CI1

Applicants should establish a neighborhood liaison program for each neighborhood within their proposed geographic service area and publicize within the neighborhood the name, address, fax and phone number of the neighborhood liaison. The liaison is encouraged to meet with the community to present their proposals prior to application to the Planning Department. However, once an application is filed with the Planning Department, the Project Sponsor must meet with neighbors and representatives of any neighborhood organization within the area to present their proposal(s). The liaison program should continue throughout the time the WTS facility remains operational in the neighborhood.

### CI2

To the extent lawfully permitted, the Applicant should pay the proportionate costs (time and materials) to support an on-going Citywide Interdepartmental Committee or group to meet regularly to coordinate the siting, monitoring and compliance of WTS facilities. Such a group could include representatives from the Department of Planning, the Department of Building Inspection, the Department of Public Health, the Department of Electricity and Telecommunications, the Chief Administrative Officer, the Department of Public Works, the Office of the City Attorney, the Department of Real Estate (or their equivalents), among others.

## Section 8. Standard Location and Urban Design Siting Preferences.

Wireless Telecommunication Services require various types of facilities, depending upon the technology and radio frequency used and the geographic service area. Television and Radio transmissions require tall towers which typically serve customers throughout a large region. Personal pagers and cellular phones require more numerous yet smaller antennas and relay station facilities. These Guidelines will address Location Preferences, Urban Design Criteria and Sample Conditions of Approval for cellular phone facilities, personal communications services (PCS), Enhanced Specialized Mobile Radio (ESMR) facilities, and other wireless telecommunications facilities which feature similar equipment and land use impacts and are regulated by the FCC. These Guidelines do not address issues related to large towers, monopoles, satellite dishes or micro-dish facilities serving personal pagers.

The Department's experience in the siting of accessory and conditional uses in industrial, commercial, mixed use and residential districts informs them that certain structures are more adaptable to such ancillary facilities and are perceived by the public to be less intrusive than other structures. Placing WTS facilities on certain structures can ameliorate adverse visual or aesthetic effects of such installations. The following location preferences and urban design criteria and treatments, and associated standard conditions of approval, are intended to ameliorate any potential visual or neighborhood livability concerns while still facilitating growth of an industry that is vital to the City's economic health and whose services are demanded by an increasing number of the City's residents, businesses, workers and visitors.

### Section 8.1. Location Preferences

The locations for siting of WTS/Personal Communications Services (PCS) facilities in the City are listed



in paragraphs 1 through 6 below, in the order of preference. Locations 1 through 3 are preferred relative to the siting of facilities on solely residential buildings, because publicly-owned, institutional, industrial or commercial structures are more similar in use to the WTS installation than residential structures and would appear less noticeable. Locations identified in paragraphs 4 through 6 are considered lower preferences and, where installation of a facility is requested on a location identified in paragraphs 4 through 6, each applicant must describe in writing, with submission with the application material, what good faith efforts and measures were undertaken to secure locations meeting preferences 1 through 3 but failed to produce a higher preference site.

#### Preferred Locations Within A Particular Service Area

1. Publicly- used structures. Public facilities such as police or fire stations, libraries, community centers, utility structures, water towers, elevated roadways, flag poles or other public structures. Where the installation complies with all FCC regulations and standards, schools, hospitals, health centers, places of worship, or other institutional structures should also be considered.
2. Industrial or Commercial Structures. Industrial or commercial structures within the service area such as warehouses, factories, retail outlets, supermarkets, banks, garages, service stations and mixed use (Residential/Commercial) buildings where existing visual obstructions/clutter on the roof or along the roofline can and will, in a commercially practicable manner, be removed as part of the installation.
3. Industrial or Commercial Structures. Industrial or commercial structures within the service area such as retail outlets, supermarkets, banks, garages, service stations and mixed use (Residential/Commercial) buildings where existing visual obstructions/clutter on the roof or along the roofline will not be removed as part of the installation.
4. Solely residential buildings which exceed the building height of the Height District and for which the Applicant can and will, in a commercially practicable manner, remove any existing visual obstructions/clutter on the roof or along the roofline of the building such as a rooftop mechanical feature, clothes lines, or other similar visual clutter or obstruction.
5. Solely residential buildings which exceed the building height of the Height District and for which the Applicant will install only the antenna on the building roof or facade and all back-up equipment will be installed within the building envelope or will install the back-up equipment in such a way as to minimize visual obstruction.
6. Solely residential buildings which are at or below the allowable building height of the Height District.

#### Section 9. Building Siting Criteria

Each WTS/PSC facility shall be installed on and/or within the building in such a way as to:

1. Minimize the visual impact of the installation from public vistas or streets.
  2. Minimize visual impacts of the facility from habitable living areas (such as bedrooms or living rooms) of residential units which directly face the antenna within 100 feet horizontal distance.
- Whenever possible, back-up facilities shall be installed within the existing building envelope;
  - If new construction is required for the back-up equipment, the housing for this equipment shall be





low-lying and shall be painted, screened, landscaped or otherwise treated architecturally to minimize visibility of the equipment or to otherwise create a visually pleasing feature;

•If back-up equipment is installed on the roof, the facility shall be setback or otherwise located to minimize visibility, especially from the street or public places.

3.Minimize noise and thermal transmission from equipment to tenants of the subject building. In Residential districts, San Francisco noise standards for residential use must be met. Noise levels created by back-up equipment, such as air conditioning, ventilation or power equipment, should at all times be within the levels established by the San Francisco Noise Ordinance.

4.Avoid or minimize intrusion into usable open space within the lot.

5.Site antennas in such a way and provide barriers and signage to prevent a person from passing within the safety limits established by the FCC-adopted standards for controlled access.

## **Section 10 . Application Information Required**

Each application for a WTS facility, whether an antenna, relay station or other similar structure or equipment shall provide the following information to the Planning Department.

### **10.1.Five Year Facilities Plan.**

Each application shall include a five year facilities plan which shall describe: (1) Generally, the type of telecommunications services expected to be provided by the Applicant within the City over the five year period; (2) a description of how these services would be provided throughout the City and would not result in lower service than required in any one neighborhood (ie. No "redlining" of service); (3) a description of the number of geographic service areas within the City and a map showing these areas; and (4) a description of the number of installations anticipated for each geographic service area and the number of antennas anticipated for each cell site therein.

### **10.2. Service Area Definition.**

Each application shall identify the geographic service area for the subject installation, including a map showing the site and the associated "next" cell sites within the network. Describe the distance between cell sites. Describe how this service area fits into and is necessary for the company's service network.

### **10.3. Location Preference within the Service Area.**

Each application shall provide the following information:

Identify which Location Preference, identified in Section 8.1. above, the proposed facility is meeting. If the proposed location is not a Preference 1 through 3 location,describe the efforts and measures taken to pursue those preferences and why a higher preference location was not technologically, legally or economically feasible.

### **10.4.Cumulative Effects:**

10.4.1Identify the location of the Applicant's antennas and back-up facilities per building and number and location of other telecommunication facilities on the property; include the following data for each facility:



- a.) Height of all existing and proposed WTS facilities on the property, shown in relation to the height limit for the District and measured from sidewalk grade;
- b.) Dimensions of each existing and proposed antenna and back-up equipment on the property;
- c.) Power rating for all existing and proposed back-up equipment subject to the Application;
- d.) Preferred method of attachment of proposed antenna (roof, wall mounted, monopole) with plot or roof plan along with detailed installation plans with a description for screening and/or visual integration into the building's architecture.

#### 10.5. Report estimated Ambient Radio Frequency Fields for the proposed site.

10.5.1. Identify the total number of watts per installation and the total number of watts for all installations on the building (roof or side).

10.5.2. Identify the number and types of WTS within 100 feet of the proposed site and provide estimates of cumulative EMR emissions at the proposed site.

10.6. To show the scale of the locale, provide photographs (photo montage) identifying the height of buildings within 100 feet distance of the proposed site showing the primary building facades.

10.7. If there is a commonly identified public view corridor within 100 feet of the proposed site (such as an entrance to the City, a view of a famous City landmark or vista), identify what element(s) of the proposed facility (including screening) can be viewed from this public space or vista point.

#### 10.8. Maintenance Program.

Provide a description of the anticipated maintenance and monitoring program for the antennae and back-up equipment, including frequency of maintenance services, back-up service plans for disruption of service due to repair, maintenance or monitoring activities.

#### 10.9 Public Notification.

10.9.1. Provide a list and set of mailing labels for both owners and tenants (occupant designation for tenants is acceptable) of properties within 300 feet of the proposed property. Applicants will not be responsible for notice to tenants of units existing without legal permits. Note the number of addressees on the list.

10.9.2. Provide signage at the facility identifying all WTS equipment and safety precautions for people nearing the equipment as may be required by any applicable FCC-adopted standards.

### Section 11. Sample Conditions of Approval

The Planning Commission or Zoning Administrator could place any or all of these conditions, or could place similar conditions of approval on specific applications. Each application would be reviewed and analyzed on a case-specific basis. It is anticipated that, if deemed suitable for approval, applications for similar-technology WTS facilities will be given the following conditions of approval.





## Conditions of Approval.

1. Authorization. This authorization is granted to install a public use in the form of \_\_\_ antennas and \_\_\_ base receivers (the "facilities") for the provision of personal wireless services on the \_\_\_ of an existing structure at \_\_\_\_\_, Assessor's Block \_\_\_\_, Lot \_\_\_\_; the facilities are to be installed in general conformity with the plans submitted with the Application and identified as EXHIBIT \_\_, dated \_\_\_\_\_ and submitted to the Commission for review on \_\_\_\_\_.

2. Plan Drawings. Prior to the issuance of any building or electrical permits for the installation of the facilities, the Project Sponsor shall submit final scaled drawings for review and approval by this Department ("Plan Drawings"). The Plan Drawings shall:

a.) Structure and Siting. Identify all facility related support and protection measures to be installed. This includes, but is not limited to, the location(s) and method(s) of placement, support, protection, screening, paint and/or other treatments of the antennas and other appurtenances to insure public safety, insure compatibility with urban design, architectural and historic preservation principles, and harmony with neighborhood character.

b.) Cumulative Facilities. For the Subject Property, regardless of the ownership of the existing facilities:

i) Identify the location of all existing antennas and facilities;

ii) identify the location of all approved (but not installed) antennas and facilities.

c.) Emissions. Provide a report (as described in Condition 3(e) and 8 below), subject to approval of the Zoning Administrator, that operation of the facilities in addition to ambient RF emission levels will not exceed adopted FCC standards with regard to human exposure in uncontrolled areas.

3. Project Implementation Report. The Project Sponsor shall prepare and submit to the Zoning Administrator a Project Implementation Report. The Project Implementation Report shall:

a.) identify the three-dimensional perimeter closest to the facility at which adopted FCC standards for human exposure to RF emissions in uncontrolled areas are satisfied;

b.) document testing that demonstrates that the facility will not cause any potential exposure to RF emissions that exceed adopted FCC emission standards for human exposure in uncontrolled areas.

c.) the Project Implementation Report shall compare test results for each test point with applicable FCC standards. Testing shall be conducted in compliance with FCC regulations governing the measurement of RF emissions and shall be conducted during normal business hours on a non-holiday week day with the subject equipment measured while operating at maximum power.

d.) Testing, Monitoring, and Preparation. The Project Implementation Report shall be prepared by a certified professional engineer or other technical expert approved by the Department. At the sole option of the Department, the Department (or its agents) may monitor the performance of testing required for preparation of the Project Implementation Report. The cost of such monitoring shall be borne by the Project Sponsor pursuant to the condition related to the payment of the City's reasonable costs.



e.) Notification and Testing. The Project Implementation Report shall set forth the testing and measurements undertaken pursuant to Condition 8, below.

f.) Approval. The Zoning Administrator shall request that the Certification of Final Completion for operation of the facility not be issued by the Department of Building Inspection until such time that the Project Implementation Report is approved by the Department for compliance with these conditions.

4. Notification prior to Project Implementation Report. The Project Sponsor shall undertake to inform and perform appropriate tests for residents of dwelling units located within 25 feet of the transmitting antennae at the time of testing for the Project Implementation Report.

a.) At least twenty calendar days prior to conducting the testing required for preparation of the Project Implementation Report, the Project Sponsor shall mail notice to the Department, as well as the resident of any legal dwelling unit within 25 feet of a transmitting antenna, of the date on which testing will be conducted. The Applicant will submit a written affidavit attesting to this mail notice along with the mailing list.

b.) When requested in advance by a resident notified of testing pursuant to subsection (a), the Project Sponsor shall conduct testing of total power density of RF emissions within the residence of that resident on the date on which the testing is conducted for the Project Implementation Report.

5. Community Liaison. Within 10 days of the effective date of this authorization, the Project Sponsor shall appoint a community liaison officer to resolve issues of concern to neighbors and residents relating to the construction and operation of the facilities. Upon appointment, the Project Sponsor shall report in writing the name, address, telephone and facsimile number of this officer to the Zoning Administrator. The Community Liaison Officer shall report to the Zoning Administrator what issues, if any, are of concern to the community and what issues have not been resolved by the Project Sponsor.

6. Installation. Within 10 days of the installation and operation of the facilities, the Project Sponsor shall confirm in writing to the Zoning Administrator that the facilities are being maintained and operated in compliance with applicable Building, Electrical and other Code requirements, as well as applicable FCC emissions standards.

#### 7. Screening.

a.) To the extent necessary to ensure compliance with adopted FCC regulations regarding human exposure to RF emissions, and upon the recommendation of the Zoning Administrator, the Project Sponsor shall:

i.) Modify the placement of the facilities;

ii.) Install fencing, barriers or other appropriate structures or devices to restrict access to the facilities;

iii.) Install multi-lingual signage, including the RF radiation hazard warning symbol identified in ANSI C95.2-1982, to notify persons that the facility could cause exposure to RF emissions; and/or

iv.) Implement any other practice reasonably necessary to ensure that the facility is operated in compliance with adopted FCC RF emission standards.

b.) To the extent necessary to minimize visual obtrusion and clutter, installations shall conform to the





following standards:

- i)Antennas and back-up equipment shall be painted, fenced, landscaped or otherwise treated architecturally so as to minimize visual impacts;
- ii)Rooftop installations shall be setback such that back-up facilities are not viewed from the street;
- iii)Antennae attached to building facades shall be so located, placed, screened or otherwise treated to minimize any negative visual impact;
- iv)If WTS facilities are to be located on architecturally-significantly or historic buildings or structures, all facilities shall be integrated architecturally with the style and character of the structure or otherwise made unobtrusive;
- v)Although co-location of various companies' facilities may be desirable, a maximum number of antennas and back-up facilities per property shall be established, on a case-by-case basis, such that "antennae farms" or similar visual intrusions for a site and area is not created; and
- vi)The Project Sponsor shall remove antennae and equipment that has been out of service for a continuous period of six months.

8.Periodic Safety Monitoring. The Project Sponsor shall submit to the Zoning Administrator 10 days after installation of the facilities, and every two years thereafter, a certification attested to by a licensed engineer expert in the field of EMR/RF emissions, that the facilities are and have been operated within the then current applicable FCC standards for RF/EMF emissions.

9Emissions Conditions. It is a continuing condition of this authorization that the facilities be operated in such a manner so as not to contribute to ambient RF/EMF emissions in excess of then current FCC adopted RF/EMF emission standards; violation of this condition shall be grounds for revocation.

10.Noise and Heat. The WTS facility, including power source, ventilation and cooling facility, shall be operated at all times within the limits of the San Francisco Noise Ordinance. The WTS facility, including power source and cooling facility, shall not be operated so as to cause the generation of heat that adversely affects an building occupant.

#### 11.Implementation and Monitoring Costs.

a.)The Project Sponsor, on an equitable basis with other WTS providers, shall pay the cost of preparing and adopting appropriate General Plan policies related to the placement of WTS facilities. Should future legislation be enacted to provide for cost recovery for planning, the Project Sponsor shall be bound by such legislation.

b.)The Project Sponsor or its successors shall be responsible for the payment of all reasonable costs associated with the monitoring of the conditions of approval contained in this authorization, including costs incurred by this Department, the Department of Public Health, the Department of Electricity and Telecommunications, Office of the City Attorney, or any other appropriate City Department or agency pursuant to Planning Code Section 351(f)(2). The Planning Department shall collect such costs on behalf of the City.

c.)The Project Sponsor shall be responsible for the payment of all fees associated with the installation of



the subject facility which are assessed by the City pursuant to all applicable law.

12. All Conditions Basis for Revocation. The Project Sponsor or its successors shall comply fully with all conditions specified in this authorization. Failure to comply with any condition shall constitute grounds for revocation under the provisions of Planning Code Sections 174, 176 and 303(d). The Zoning Administrator shall schedule a public hearing before the Planning Commission to receive testimony and other evidence to demonstrate a finding of a violation of a condition of the authorization of the use of the facility and, finding that violation, the Commission shall revoke the Conditional Use authorization. Such revocation by the Planning Commission is appealable to the Board of Supervisors.

In the event that the project implementation report includes a finding that RF emissions for the site exceed FCC Standards in any uncontrolled location, the Zoning Administrator may require the Applicant to immediately cease and desist operation of the facility until such time that the violation is corrected to the satisfaction of the Zoning Administrator.

13. Complaints and Proceedings. Should any party complain to the Project Sponsor about the installation or operation of the facilities, which complaints are not resolved by the Project Sponsor, the Project Sponsor (or its appointed agent) shall advise the Zoning Administrator of the complaint and the failure to satisfactorily resolve such complaint. If the Zoning Administrator thereafter finds a violation of any provision of the City Planning Code and/or any condition of approval herein, the Zoning Administrator shall attempt to resolve such violation on an expedited basis with the Project Sponsor. If such efforts fail, the Zoning Administrator shall refer such complaints to the Commission for consideration at the next regularly scheduled public meeting.

14. Severability. If any clause, sentence, section or any part of these conditions of approval is for any reason held to be invalid, such invalidity shall not affect or impair other of the remaining provisions, clauses, sentences, or sections of these conditions. It is hereby declared to be the intent of the Commission that these conditions of approval would have been adopted had such invalid sentence, clause, or section or part thereof not been included herein.

15. Transfer of Operation. Any carrier/provider authorized by the Zoning Administrator or by the Planning Commission to operate a specific WTS installation may assign the operation of the facility to another carrier licensed by the FCC for that radio frequency provided that such transfer is made known to the Zoning Administrator in advance of such operation, and all conditions of approval for the subject installation are carried out by the new carrier/provider, and the authorizing Motion is recorded on the deed of the property stating the new carrier/provider and authorizing conditions of approval.

16. Compatibility With City Emergency Services. The facility shall not be operated, nor caused to transmit on or adjacent to any radio frequencies licensed to the City for emergency telecommunication services such that the City's emergency telecommunications system experiences interference, unless prior approval for such has been granted in writing by the City.

17. Recordation. The Property Owner shall execute and record these specified conditions as a Notice of Special Restrictions at the Office of the County Recorder/County Clerk.

SAN FRANCISCO  
CITY PLANNING COMMISSION  
RESOLUTION NO. 14123

WHEREAS, The San Francisco Planning Code allows communication utilities such as commercial





wireless transmitting, receiving or relay facilities, such as radio, television, paging or cellular antennas and base stations, to be located in various parts of the City and such facilities are allowed as a Principal Use in Commercial and Industrial Districts when the facility meets certain height and distance from residences criteria and allows their installation as a Conditional Use in those districts if they do not meet those criteria; and

WHEREAS, The San Francisco Planning Code allows communication utilities such as commercial wireless transmitting, receiving or relay facilities as a Conditional Use in Residential, mixed Residential-Commercial Districts, Neighborhood Commercial and Mixed Use Districts; and

WHEREAS, In the next few years, it can be expected that most businesses and many residents in the City will be using both hard wire electronic communication systems (computers, facsimile machines, cable television and radio) and wireless communication systems (cellular phones, pagers, satellite dish radio and television, facsimile and video communications, etc.) and, as a consequence, the number, size, location and types of wireless communication facilities, including antennas, will change dramatically over the next decade; and

WHEREAS, The Planning Department and Planning Commission has relied on the process of administrative review of antennas in some Districts and Planning Commission Conditional Use review of antennas in other Districts for decades, however, with the current proliferation of such facilities and the anticipation of a greater number of applications for new technologies in the near future, the land use implications of telecommunications facilities have changed and require greater scrutiny and regulation; and

WHEREAS, New technologies will require new criteria for the siting of wireless communication facilities, new procedures for the review of applications, and new measures to ameliorate or mitigate potential adverse impacts associated with these new facilities; and

WHEREAS, The land use implications for these wireless communications facilities, including cellular telephone, Personal Communications Services (PCS), and Enhanced Specialized Mobile Radio (ESMR) antennas and other wireless telecommunications facilities with similar equipment generally reflect the following concerns:

- Land use compatibility with residential uses regarding noise associated with 24-hour operation of the facility;
- Land use compatibility with other transmission facilities such that new systems do not interfere with existing facilities and harm existing businesses;
- Health concerns associated with enforcement of Federal Communications Commission (FCC) adopted standards for human exposure to Electromagnetic Radiation and Radio Frequency radiation;
- Urban design concerns related to visual obstruction, view blockage, and compatibility with architectural character of the building and neighborhood;
- Facilitating economic development and vitality of businesses in the City which depend on these technologies;
- Creating new job opportunities for San Franciscans;



•Providing sufficient facilities to serve residents, visitors and workers with the technological amenities they desire for modern livability (such as television, radio, cell phone and personal pagers); and

WHEREAS, the location preferences, urban design criteria, standards, policies, and guidelines presented in the attached Guidelines, once endorsed by the Commission, would provide guidance to Department staff where administrative review is warranted and to the Planning Commission in their consideration of Conditional Use applications for such facilities and would inform Project Sponsors of the standards to be used by the Department and Commission in the review of any proposed wireless telecommunications facilities with similar land use implications as cellular telephone, PCS, ESMR and other similar projects, and all applications would be reviewed and measured by the same standards as presented herein; and

WHEREAS, Any substantive amendments to the standards in the Guidelines would require endorsement by the Planning Commission at a duly noticed public hearing and, if amended, the amended standards would be made available to the public and prospective Project Sponsors;

THEREFORE BE IT RESOLVED, That the Planning Commission intends to use the location preferences, urban design criteria, siting policies, application information requirements and sample conditions of approval (conditions would be amended, as needed, on a case-by-case basis to properly address a specific site and facility) contained in the document entitled Wireless Telecommunications Services (WTS) Facilities Siting Guidelines, dated May 23, 1996, in their review and consideration of Conditional Use applications for telecommunications facilities subject to the provisions of the Planning Code and for Master Plan referrals subject to the provisions of the City Charter and which are filed after May 23, 1996 and the Commission intends to use the sample conditions of approval described in the Guidelines (conditions would be amended, as needed, on a case-by-case basis to properly address a specific site and facility) for their consideration of any current/active Conditional Use application which was filed prior to May 23, 1996; and

BE IT FURTHER RESOLVED, That the Planning Commission urges the Zoning Administrator to use these same Guidelines in the review and consideration of building permit applications for telecommunications facilities subject to the provisions of Section 227(h) of the Planning Code and for any other provision where administrative review of such building permit applications are warranted and;

BE IT FURTHER RESOLVED, That the location preferences, siting policies and sample conditions of approval as described in the Guidelines for review of Conditional Use applications or administrative building permit review shall not apply to permit applications for repair or maintenance of any legally existing such facilities or to replacement or upgrading of such legally existing facilities when the replacement or upgrade (such as replacement of analog equipment to digital equipment) would be of equal size and power or would be smaller and use less power or in any other manner be less visually obtrusive than the existing legal equipment/facility; and

BE IT FURTHER RESOLVED, That the Planning Commission urges the San Francisco Port Commission, San Francisco Port Authority, the San Francisco Redevelopment Commission and San Francisco Redevelopment Agency to use these same Guidelines in the review and consideration of building permit applications for telecommunications facilities for properties lying within their respective jurisdictions and for any other provision where administrative review of such building permit applications by these City agencies are warranted; and

BE IT FURTHER RESOLVED, That the Planning Commission urges City legislators and administrators to support the Department of Public Health, or another appropriate City agency, to develop and maintain





a monitoring program for the City which would review scientific research and literature regarding potential human health effects of wireless telecommunications technology, which would review compliance reports required by the Planning Commission on individual WTS installations, and which would report to the Planning Commission on an annual basis any significant developments that could require the Commission and/or the City to revisit and/or amend the policies contained within these Guidelines or any conditions placed on individual installation authorizations; and

BE IT FURTHER RESOLVED, That the Planning Commission urges City legislators and/or administrators to establish a citywide oversight body to address issues related to the development and growth of the telecommunications industry within the City and County of San Francisco; the oversight body would (1) coordinate efficient interdepartmental permit review of telecommunication infrastructure, (2) address issues related to the provision of various types of services throughout the City, (3) monitor any potential impacts associated with telecommunications systems in the City, and (4) work closely with interested members of the public, other City agencies, Commissions, Legislators and other policy makers to formulate any necessary public policy, protocol, coordinating or monitoring program, or other City regulation which would facilitate the development of telecommunications facilities and services within the City while protecting and promoting the general welfare of the City.

I hereby certify that the foregoing Resolution was ADOPTED by the City Planning Commission at its regular meeting of May 23, 1996.

Linda Avery,  
Commission Secretary  
AYES: Commissioners Chinchilla, Levine, Marks and Mills  
NOES: Commissioner Hayden  
EXCUSED: Commissioner Lowenberg  
ABSENT: Commissioner Martin  
ADOPTED: May 23, 1996  
SCM\WTSGuidelines\5/23/96





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